
APPENDIX E
COMMENTS AND RESPONSES ON DRAFT EA

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RESPONSES TO COMMENTS RECEIVED

The public and agency review period for the draft EA/FONSI commenced on August 22, 2005 and ended on September 20, 2005. The only comments received regarding the project were received from the Salton Sea Authority (Authority). The Authorities comments in entirety follow this response. The three “specific concerns and issues” raised by the Authority regarding the project are:

1. Why is the project being undertaken?
2. Confusion regarding the mention of a “desalination plant” and the “completely erroneous statement...that the established restoration components...include...new water generation” under the Cumulative Projects section of the draft EA/FONSI.
3. Failure on Reclamation’s part to submit the “work plan for this project” “to the Authority for its review and comments before Reclamation commenced work and publicly released the referenced Environmental Assessment Report” so that the Authority could have “pointed out the...factual mistakes in the basic premise and design of this project... thus saving U.S. taxpayers the cost of paying consultants to prepare the Environmental Impact Assessment Report and to perform the initial design work for the project.”

Reclamation has worked with the Authority since 1993 when the Authority was established as the local agency to work on restoring the Salton Sea. Reclamation is sincerely puzzled to have received such comments from the Authority given the fact that we have worked and coordinated with the Authority in the effort to identify restoration options for the Salton Sea. Reclamation appreciates the time taken by the Authority to review the draft EA/FONSI and to provide Reclamation with comments. The comments have been reviewed and Reclamation finds that they do not add substantive information for the operation or outcome of the project. As such,

Reclamation will keep the comments in consideration but will continue with the project as planned since it has been identified as a key feature of possible future restoration plans for the Salton Sea. It is our belief that information obtained from this study effort will assist any agency working on the Sea's restoration by identifying the potential success or issues of concern involving such saline shallow water habitat. Should this study provide positive results, then these saline shallow water wetlands could be created on newly exposed Salton Sea sediments, therefore not only offering valuable avian habitat but valuable dust mitigation of the newly exposed sediments.

Salton Sea Authority

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PROJECT		
CONTROL NO.		
FOUNDER ID		
KEYWORD		

September 12, 2005

Bureau of Reclamation
Lower Colorado River Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470
Attn: Cheryl Rodriquez (LC-1340)

by Mr. Walker
LC-1000 Johnson

Re: Draft Environmental Impact Assessment and Finding of No Significant Impact
for the Shallow Water Habitat Pilot Project (the "Referenced Document")

Dear Ms. Rodriquez:

The Salton Sea Authority finds the referenced report and proposed project to be emblematic of the unilateral, uninformed, and counterproductive approach that the Bureau of Reclamation is taking toward Salton Sea restoration. The specific concerns and issues that we have with this particular project are detailed in this letter.

Our first issue with this project is why it is even being undertaken. As you know (since several Reclamation staffers were in attendance), the USGS Salton Sea Science Office convened an experts' workshop on November 15-17, 2004, in Riverside, California. The purpose of this workshop was to evaluate a proposed "North Lake Plan" for Salton Sea rehabilitation which, at that time, was being advocated by the Salton Sea Authority. A key feature of this now-defunct plan was the construction of shallow-water habitat areas in the southend of the existing Sea, including the proposed location for this pilot project. The Authority's plan was to keep these areas wet using Alamo River water and/or a mix of North Lake water and river water.

One of the "specific concerns and recommendations" stated in the final peer-reviewed report from this experts' workshop states that: **"River water would not be suitable for any wetlands or ponds even if it is mixed with lake water."**¹ The final report goes on to say:

"The water quality group ... expressed concern over the potential for selenium toxicosis in the saline shallow water habitat areas constructed upon old Sea lakebed [and] recommended that neither river water nor drainage water be added to the shallow habitat impoundments because of selenium issues." Furthermore, the report specifically warns that use of river water in the southern shallow habitat areas "will result in higher selenium concentrations in these wetlands with the potential for classic avian selenosis syndrome

¹ *Integrated Water Management Plan*, "A Review of the Salton Sea Authority's Preferred Project Concept for Rehabilitating the Salton Sea," March 2005, by Michael Cohen of the Pacific Institute; p. ES-2. The inside cover states: "The Compilation of the IWMP Workshop proceedings was funded by the Bureau of Reclamation."

(embryonic malformations, etc.) similar to that seen at Kesterson.” And finally: “These [southern shallow water habitat] wetlands are likely to have low dissolved oxygen levels and high temperatures, which will stress fish, leading to mortality and/or opportunities infections.”²

As we understand the proposed pilot project, **Reclamation is planning to do exactly what the panel of scientific experts has said not to do.**³ In contrast to this unilateral and contrarian position by Reclamation, the Authority has heeded the advice of the experts and has eliminated the creation of shallow water habitat areas in the Authority’s current preferred design. Indeed, since both the Congress and the California State Legislature have established a deadline for arriving at a preferred alternative (December 31, 2006), and only limited financial resources are available at all levels of government, we feel it is counterproductive for Reclamation to spend time and money performing pilot projects that are not based on sound science.

Should Reclamation wish to pursue this pilot project despite the opposing expert opinion, we would strongly suggest that Reclamation subject this project to review and scientific validation by the Habitat Work Group of the State Salton Sea Advisory Committee. If this group determines this project has scientific merit, then the full advisory committee should approve the expenditure of public funds. This Committee has balanced federal, state and local representation and serves as the forum through which other entities (including the Salton Sea Authority) have vetted their pilot project proposals. This type of three-way coordination with “equal and transparent” technical scrutiny is necessary so that we can assure the elected officials at all levels of government that the pool of public funds available for Salton Sea restoration work is being spent as advantageously as possible in a coordinated manner.

Secondly, we are troubled and confused by the repeated references in this document to a “**desalination plant**” and the completely erroneous statement on page 1-12 that “**the established restoration components ...include ...new water generation.**” Indeed, the entire premise of this shallow habitat pilot project, as well as the separate Vertical Tube Evaporation (VTE) Pilot Project which Reclamation is also currently funding (as mentioned on page 1-12) is that the final Salton Sea restoration project will include a desalination plant for demineralizing the low-salinity agricultural drainage inflow streams and/or the high-salinity Salton Sea water itself.⁴

It is an undisputable fact that there is no mention of a “**desalination plant**” nor is “**new**

² *Ibid.*, pp. 20-21

³ Referenced document: “The Proposed Action is the development of a shallow water habitat system that would be operated and monitored for at least two full breeding seasons ... this project would blend water pumped from the Salton Sea, at 44 parts per thousand (ppt), with water pumped from the Alamo River, at 2.5 ppt, to obtain salinity levels ranging from 15 to 20 ppt in the ponds.” (p. 1-5).

⁴ Referenced document: “The purpose of this project is to evaluate the quality of saline shallow water habitat that would be created using water similar in quality to a discharge stream from a desalination facility.” (p. 1-1). “The VTE system ... will desalinate 5,000 gallons per day of Salton Sea water through multi-step condensing system within a vacuum.” (p. 1-12).

water generation" given as a project purpose or objective anywhere in the 1998 Salton Sea Restoration Act (PL 105-372); nor in the state legislation enacted in 2003 and 2004 as part of the Quantification Settlement Agreement (Senate Bills 277, 317, 654 and 1214); nor in the Salton Sea Authority's board-approved "Final Preferred Project Report" for Salton Sea Restoration (April 2004).⁵ We are curious, therefore, why Reclamation considers "new water generation" to be a project purpose? Secondly, why is Reclamation spending appropriated funds from its Salton Sea account on pilot projects that have no relevancy to the legally established objectives for Salton Sea restoration and no relevancy to any project alternatives currently being considered?

This misunderstanding of the law is another example where, had Reclamation coordinated its activities with state and local officials through the Salton Sea Advisory Committee, the misuse and waste of public funds could have been avoided.⁶ As you should have been aware (since Reclamation is represented on the Committee), the Authority itself requested funding for performing desalination pilot work in November 2004. This request was rejected by the Committee and state officials for the reason given above, namely: desalination and new water generation are not project purposes under federal and state law.⁷ Moreover, as work has progressed in the state process for identifying a preferred alternative, it has become evident that the long-term inflows to the Sea after the QSA water transfers will be much lower than assumed when the QSA was approved. This fact makes the possibility for "new water generation" for out-of-basin transfers as a component of a restoration project both technically and legally infeasible. So again, why is this pilot project being pursued?

Thirdly, the work plan for this project was not submitted to the Authority for its review and comments before Reclamation commenced work and publicly released the referenced Environmental Assessment Report. Had Reclamation first reviewed this project with the Authority, we would have pointed out the following factual mistakes in the basic premise and design of this project. This review would have saved U.S. taxpayers the cost of paying consultants to prepare the Environmental Impact Assessment Report and to perform the initial design work for the project.

⁵ Salton Sea Authority's board of directors is in the process of adopting specific "Principles and Policy Positions for Salton Sea Restoration" to establish the parameters for a locally preferred restoration project. (See July 2005 SSA board meeting packet for current draft.) When enacted, these policies will supersede the Authority's April 2004 preferred alternative report. These principles and policies do not include a desalination plant as an essential project component; nor do they establish "new water generation" as a project purpose.

⁶ After learning of the conclusions from the USGS and Reclamation sponsored workshop in November 2004, I called the Lower Colorado Regional Director (Bob Johnson) and personally advised him that both the shallow-water habitat and VTE pilot projects should be cancelled since neither project had any technical merit or relevancy to a feasible restoration project design. I said that the appropriated federal funds allocated to these projects should be put to better use. I understand state officials also made this same request to Mr. Johnson at the same time for the same reason.

⁷ Coachella Valley Water District and Imperial Irrigation District also had objections to including a desalination plant as a component of a Salton Sea restoration project. This was another reason why the Authority dropped consideration of desalination last year.

- The premise that mixing existing Salton Sea water (which has 1-2 µg/L of selenium) with Alamo River water (which has a mean selenium concentration of about 8 µg/L) will produce a test water for use in the constructed ponds that **“accurately duplicates a water stream from a desalination plant”** is not true.⁸ The discharge stream from a desalination plant would contain about four times the selenium concentration of the feed water. This is because (i) essentially all the selenium in the feed water would be concentrated in the discharge stream; and (ii) a typical recovery rate for the most likely type of desalination process that would be used in this application (membrane nanofiltration) is about 75%.⁹ Thus, the test water used in this pilot project should have approximately 32 µg/L of selenium to accurately replicate the discharge stream from a desalination plant.¹⁰ Obviously, selenium concentrations in the range 32 µg/L of can not be attained by mixing Alamo River water (8 µg/L) and Salton Sea water (1-2 µg/L).
- The statement on page 1-12 of the referenced document that says **“None of the locations proposed for ... the components [of the Salton Sea Authority’s proposed project for Salton Sea restoration] would be near or conflict with [the location of] this Project”** is not true. In fact, the proposed location of the shallow ponds that would be built for this pilot project are in exactly the same location (i.e., north of Red Hill Marina and west of Davis Road) where the Authority anticipates: (i) constructing dikes to form the perimeter of a lake in the southern end of the Sea; and (ii) building a large pumping plant as part of an inter-lake circulation system as needed for water quality management. Since the Resources Agency is also considering a project design that is essentially identical to the Authority’s proposed design (the so-called “combined” north and south lakes design), the proposed location for this pilot test project also conflicts with at least one of the state’s restoration project-design alternatives. As indicated in the Authority’s letter to the Salton Sea Congressional Task Force, dated July 22, 2005 (on which Reclamation was copied), the Authority has developed and has begun implementation of an Action Plan aimed at commencing field work on a locally preferred and financed Salton Sea revitalization project within three years. Obviously, having construction equipment in operation near the proposed site for this project would be incongruous with the project’s objective of observing natural bird behavior. To avoid this potential conflict, we strongly

⁸ Reference document: “The purpose of the project is to evaluate the quality of saline shallow shorebird habitat that would be created using *water similar in quality* to a discharge stream from a desalination facility.” (p. 1-1). The selenium concentrations for the Alamo River and the Salton Sea are given in the IWMP Report by Cohen, p. 4.

⁹ Personal knowledge from work experience on agricultural drainage desalination projects in the San Joaquin Valley.

¹⁰ The counter argument could be that, in designing this pilot test project, Reclamation is assuming that selenium treatment technology would be used in an actual desalination plant to reduce the selenium level in the discharge stream to <5µg/L; hence, mixing Alamo River and Salton Sea water would achieve a test water with a **selenium concentration** representative of treated desalination-plant discharge. The problem with this argument is that, in field pilot tests performed by Reclamation in the San Joaquin Valley on various selenium treatment technologies over many years, treatment has shown the ability to reduce selenium concentration; however in all cases, treatment also altered **selenium speciation** – with some evidence of increased bioavailability. Thus, if the purpose of this proposed pilot project is to ascertain the biological suitability of using desalination-plant discharge water for creating wildlife-safe shallow shorebird habitat, the project design is flawed.

suggest that, if Reclamation wishes to continue with this project, that you move it to another location.

We regret that Reclamation has chosen not to coordinate its actions with the Authority and not to work with us in a mutually supportive manner. We find Reclamation's "go it alone" approach to be particularly egregious since federal legislation (PL 108-361) enacted in 2004 directs Reclamation to coordinate with Salton Sea Authority and the State of California on completing a feasibility study for Salton Sea restoration by December 31, 2006.

We do not see how accomplishing this Congressionally mandated task will be possible if Reclamation continues its practice of not consulting and conferring with the Authority before spending time and taxpayers' money performing studies and producing reports; and releasing document (like this Environmental Assessment Report) to the public without first having reviewed the document for accuracy and suitability for public release with the Authority. Basic professional courtesy requires as much. We hope in the future that Reclamation will follow Congress' direction and extend to us such courtesy.

Sincerely,



Ronald J. Enzweiler
Executive Director
Salton Sea Authority

cc: Salton Sea Authority Board of Directors
Members of the Salton Sea Congressional Task Force
California State Senator Denise Ducheny
Dale Hoffman-Floerke, DWR Salton Sea Restoration Program Manager
Robert Johnson, USBR Regional Director, Lower Colorado Region
Michael Walker, USBR Program Manager, Salton Sea Restoration
Steve Robbins, General Manager, Coachella Valley Water District
Elston Grubaugh, Interim General Manager, Imperial Irrigation District